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| APPLICATION NO.              | FILING DATE                        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. 6264 |  |
|------------------------------|------------------------------------|----------------------|---------------------|-----------------------|--|
| 09/965,143                   | 09/27/2001                         | Hugo Cheung          | 38880.3300          |                       |  |
| 75                           | 590 07/23/2004                     | EXAMINER             |                     |                       |  |
| W. DANIEL SWAYZE, JR.        |                                    |                      | SHIN, CHRISTOPHER B |                       |  |
| TEXAS INSTR<br>P.O. BOX 6554 | LUMENTS INCORPORA<br>174. M/S 3999 | ART UNIT             | PAPER NUMBER        |                       |  |
| DALLAS, TX                   |                                    | 2182                 |                     |                       |  |

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  |  | : N-  | Applicant(s)   |             |  |  |  |
|--|--|--|---|--|-------------|--|--|--|
| Office Action Summary  |  | Applicat   | ion no.   | Applicant(s)   |             |  |  |  |
|  |  | 09/965,1   | 43  | CHEUNG ET AL.  |             |  |  |  |
|  |  | Examine  | er  | Art Unit   |             |  |  |  |
|  |  |  | ner B Shin  | 2182   |             |  |  |  |
| Period fo  | The MAILING DATE of this commu<br>or Reply   | nication appears on th   | e cover sheet with the d  | correspondence addi  | ress        |  |  |  |
| THE I - Exter after - If the - If NO - Failu Any   | ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN nsions of time may be available under the provision SIX (6) MONTHS from the mailing date of this com period for reply specified above is less than thirty ( period for reply is specified above, the maximum s re to reply within the set or extended period for repl reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b). | IICATION. s of 37 CFR 1.136(a). In no e munication. 30) days, a reply within the sta tatutory period will apply and v y will. by statute, cause the ap | vent, however, may a reply be ting<br>atutory minimum of thirty (30) day<br>will expire SIX (6) MONTHS from<br>plication to become ABANDONE | mely filed /s will be considered timely. I the mailing date of this com D (35 U.S.C. § 133). | munication. |  |  |  |
| Status   |  |  |   |  |             |  |  |  |
| 1)[  | Responsive to communication(s) fil   | ed on  |   |  |             |  |  |  |
| •  | a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.   |  |   |  |             |  |  |  |
| 3)   |  |  |   |  |             |  |  |  |
| Dispositi  | on of Claims   |  |   |  |             |  |  |  |
| 5)□<br>6)⊠<br>7)⊠  | <ul> <li>4)  Claim(s) 1-24 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-9 and 16-24 is/are rejected.</li> <li>7)  Claim(s) 10-15 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>  |  |   |  |             |  |  |  |
| Applicati  | on Papers  |  |   |  |             |  |  |  |
| •  | The specification is objected to by the  |  |   |  |             |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |  |  |   |  |             |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |  |   |  |             |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |  |  |   |  |             |  |  |  |
| Priority u   | ınder 35 U.S.C. § 119  |  |   |  |             |  |  |  |
| a)   | Acknowledgment is made of a claim  All b) Some * c) None of:  1. Certified copies of the priority  2. Certified copies of the priority  3. Copies of the certified copies application from the Internations of the attached detailed Office activities.  | y documents have be<br>y documents have be<br>s of the priority docum<br>onal Bureau (PCT Ru   | en received.<br>en received in Applicat<br>nents have been receiv<br>ule 17.2(a)).  | ion No<br>ed in this National S  | tage        |  |  |  |
| Attachmen  | t(s)   |  |   |  |             |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |  |  |   |  |             |  |  |  |
| 2) Notice 3) Information   | be of Draftsperson's Patent Drawing Review (mation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date  |  | Paper No(s)/Mail D 5) Notice of Informal F 6) Other:  | ate  | 152)        |  |  |  |

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 17-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. Claim 17 is an improperly dependent claim that is also grammatically awkward. Please review carefully and amend the claim.
  - b. Claim 18 seems to be incomplete; therefore, the examiner cannot
     determine the mete and bound of the claim 18. The same applies to claims 19 22 for the similar reason.
  - c. The metes and bounds of claims 17-22 cannot be properly determined for the above reasons; therefore, no art rejection can be applied at this time.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-2 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Beaman et al. (5,898,857).

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a. In figures 2-3 and the respective description sections teaches the all of the claimed limitations as follows:

# Claim 24 Beaman et al. (figures 2-3)

- A data communication device for communicating data with a peripheral device
  - o Feature of figure 2
- a central processing unit;
  - o feature of (20)
- a bus interface in communication with the central processing unit;
  - o feature of (50)
- at least one peripheral device
  - o feature of (24)
- a receiving logic device configured to communicate with the bus interface
  - o feature of (22)
- an individual bus coupled between the at least one peripheral device and the receiving logic device
- adads

o feature of buses of figure 2

#### Claims 1-2 Beaman et al. (figures 2-3)

- A data communication device for communicating data with a peripheral device
  - o Feature of figure 2
- a central processing unit;
  - o feature of (20)
- a bus interface in communication with the central processing unit, comprising a receiver;
  - o feature of (50)
- at least one peripheral device;
  - o feature of (24)
- a receiving logic device configured to communicate with the receiver and configured to pass data to the receiver from a selected peripheral device which is selected from one of the at least one peripheral device;
  - o feature of (22) communicate with (24) and configured to pass data to the (50)
- an individual bus coupled between the at least one peripheral device and the receiving logic device
  - feature of buses of figure 2
- a common transmission bus coupled between each of the at least one peripheral a common transmission bus

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b. Since the Beaman reference teaches all of the basic claimed limitations, the claimed invention of claims 1-2 and 24 are anticipated by the teachings the reference.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 3-8, 9, 16 & 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaman et al. (5,898,857).
  - c. As for claims 3-8, further dependent and limiting from claim 1, further discloses logic gates such as AND & OR gates, a comparator, and a multiplexor. However, such limitations of gates, comparators, and multiplexors are basic foundations of commonly known logical units such as the Beaman reference figures 2 & 3. In addition, the dependent claims do not clearly utilize such logic gates in a specific environment that are specific to the claimed environment. The examiner takes official notice one such well-known element for logical devices. One of ordinary skilled in the art knows that such limitations are basic and common compositions and foundations of logical devices of computer system. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to easily come up with the inventions form the

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teachings of common knowledge and Beaman reference for the reasons stated above.

d. As for the method version claims 9, 16 and 23, the general teachings of the apparatus claims 1 and 24 are similarly applied. The examiner notes that the method claims 9, 16, and 23 further disclose the data signal controlling limitations that are not expressly disclosed by the Boeman reference; however, such signal controlling limitations are obvious characteristics of the Boeman's system for communication between the elements 20, 22, 24, 26, 28 & 50. of figures 2-3. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art come up with the invention from the teachings of the apparatus claims 1 and 24.

### Allowable Subject Matter

4. Claims 10-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher B Shin whose telephone number is 703-305-9658. The examiner can normally be reached on 6:30-5:00 M,Tu,Th,F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703-308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher B Shin Primary Examiner Of 2182

July 21, 2004 CBS